

Listing of Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) An image sensing apparatus comprising:
 - an image sensing element having a first light receiving area and a second light receiving area other than the first light receiving area which is are formed on an image pickup area of a semiconductor substrate on which at least one of a semiconductor layer, a color filter layer, and a microlens layer is formed by a plurality of divisional exposure operations; and
 - a correction device which corrects variations in a pixel signal output from said image sensing element between a plurality of partial image sensing regions formed by the plurality of divisional exposure operations; and
 - a control device which controls said correction device to multiply the correction value to pixel signals read out from the first light receiving area and the second light receiving area via a same channel and controls to write the pixel signals to which the correction value is multiplied to a frame memory as pixel data of captured image, wherein
 - said correction device corrects the pixel signal output from said image sensing element so that the level difference between the pixel signals read out from the first light receiving area and the second light receiving area via the same channel is canceled.
2. (Currently Amended) The apparatus according to claim 1, wherein said correction device divides the partial image sensing region light receiving areas into a plurality of blocks, and performs correction using a different correction value for each block.
3. (Currently Amended) The apparatus according to claim 1, wherein the plurality of partial image sensing regions light receiving areas include at least three partial image sensing regions in one direction, and said correction device corrects remaining two image sensing regions with correction values by using as a reference a central partial image sensing region among the three partial image sensing regions.

4. (Currently Amended) The apparatus according to claim 1, wherein said correction device performs correction using different correction values in a boundary direction between the ~~partial image sensing regions, light receiving areas and the same correction value in a direction perpendicular to the boundary direction.~~
5. (Original) The apparatus according to claim 1, wherein said correction device performs correction using a different correction value for each color.
6. (Currently Amended) An image sensing apparatus comprising:
 - an image sensing element having a first light receiving area and a second light receiving area other than the first light receiving area on which color filters of a plurality of colors for sensing an object image are formed; and
 - a correction device which ~~divides an image sensing region of said image sensing element into a plurality of partial image sensing regions, and corrects variations between the partial image sensing regions~~ pixels in the light receiving areas by using a different correction value for each color; and
 - a control device which controls said correction device to multiply the correction value to pixel signals read out from the first light receiving area and the second light receiving area via a same channel and controls to write the pixel signals to which the correction value is multiplied to a frame memory as pixel data of captured image, wherein
 - said correction device corrects the pixel signal output from said image sensing element so that the level difference between the pixel signals read out from the first light receiving area and the second light receiving area via the same channel is canceled.
7. (Currently Amended) The apparatus according to claim 6, wherein said image sensing element outputs a signal from a different output unit for each ~~partial image sensing region~~ light receiving area, and said correction device performs correction using a different correction value for each output unit.

8. (Original) The apparatus according to claim 6, wherein correction is performed using a different correction value for each lens.
9. (Original) The apparatus according to claim 6, wherein correction is performed using a different correction value for each exit pupil position of an optical system.
10. (Original) The apparatus according to claim 6, wherein correction is performed using a different correction value for each F-number.